

a transfer chamber adapted to couple to and be selectively sealed from at least one processing chamber and at least one load lock chamber and to house at least an end effector of a robot adapted to transport a substrate between the at least one processing chamber and the at least one load lock chamber; and

a lid mounted on the transfer chamber wherein the lid has a curved configuration such that an edge of the lid is sealed to an edge of the transfer chamber and the lid is curved such that a center of the lid gradually increases its distance both horizontally and vertically from the edge of the transfer chamber.

14. (Twice Amended) A vacuum processing system comprising:

a transfer chamber having a domed lid;

one or more process chambers attached to the transfer chamber; and

one or more load lock chambers attached to the transfer chamber;

wherein the transfer chamber is adapted to be selectively sealed from the one or more process chambers and the one or more load lock chambers.

23. (Amended) A vacuum processing system, comprising:

a transfer chamber having at least one processing chamber and at least one load lock chamber coupled thereto, the transfer chamber being adapted to be selectively sealed from both the at least one processing chamber and the at least one load lock chamber;

a robot adapted to transport a substrate between the at least one processing chamber and the at least one load lock chamber via the transfer chamber; and

a lid mounted on the transfer chamber wherein the lid has a curved configuration such that an edge of the lid is sealed to an edge of the transfer chamber and the lid is curved such that a center of the lid gradually increases its distance both horizontally and vertically from the edge of the transfer chamber.

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24. (Amended) A vacuum processing system, comprising:
a transfer chamber having at least one processing chamber and at least one load lock chamber coupled thereto, the transfer chamber being adapted to be selectively sealed from both the at least one processing chamber and the at least one load lock chamber;

a robot adapted to transport a substrate between the at least one processing chamber and the at least one load lock chamber via the transfer chamber; and

a domed, horizontally disposed member adapted to form an airtight seal with the transfer chamber.

26. (Amended) An apparatus, comprising:
a transfer chamber adapted to:
be coupled to and selectively sealed from at least one processing chamber;
be coupled to and selectively sealed from at least one load lock chamber; and
have a robot at least partially installed therein, the robot being adapted to transport a substrate between the at least one processing chamber and the at least one load lock chamber via the transfer chamber; and
a domed, horizontally disposed member adapted to form an airtight seal with the transfer chamber.

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